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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,198	05/01/2007	Peter Isberg	43315-226459	7494
26694	7590	06/24/2009		
VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998			EXAMINER ESTRADA, ANGEL R	
			ART UNIT	PAPER NUMBER
			2831	
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			06/24/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,198	<b>Applicant(s)</b> ISBERG ET AL.	
	<b>Examiner</b> Angel R. Estrada	<b>Art Unit</b> 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-11,13 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 2,5,12 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/11/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed January 11, 2006 has been considered by the Examiner.

### ***Claim Objections***

2. Claims 5 and 14 are objected to because of the following informalities:

Claim 5 line 2, change the dependency from claim "1" to --5--, to provide the proper antecedent basis.

Claim 14 line 2, change the dependency from claim "11" to --13--, to provide the proper antecedent basis.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 6-11, 13 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama et al (JP 09-153315, cited in the IDS; hereinafter Nakayama).

Regarding claim 1, Nakayama discloses a bushing (see figure 1) for an electrical device, comprising an insulating core (1) at least partially comprising a continuous

diffusion barrier (8) comprising a continuous film with firm adhesion to the insulating core (see figure 1).

Regarding claim 3, Nakayama discloses the bushing (see figure 1), wherein the insulating core (1) comprises a body of epoxy resin impregnated paper (see figure 1).

Regarding claim 4, Nakayama discloses the bushing (see figure 1), further comprising: an outer hollow insulator (2, see figure 1) arranged outside the insulating core (1) and wherein at least a part of the outer hollow insulator (2) is coated with the diffusion barrier (8)

Regarding claim 6, Nakayama discloses the bushing (see figure 1), wherein the diffusion barrier (8) comprises at least one of the following, an organic film or an organic/inorganic hybrid film.

Regarding claim 7, Nakayama discloses the bushing (see figure 1), wherein the diffusion barrier (8) comprises a multi-layer film.

Regarding claim 8, Nakayama discloses the bushing (see figure 1), wherein the diffusion barrier (8) comprises particles of hybrid or inorganic nature (see figure 1).

Regarding claim 9, Nakayama discloses the bushing (see figure 1), wherein the diffusion barrier (8) has a coefficient of water permeability smaller than  $0.1 \text{ g.m}^{-1}.\text{day}^{-1}$

Regarding claim 10, Nakayama discloses the bushing (see figure 1), wherein the diffusion barrier (8) is deposited on at least part of the insulating core (1) and/or the outer hollow insulator (2) by one of the following methods,: dipping, painting, spraying, plasma arc, sol-gel technology, Physical Vapor Deposition or Chemical Vapor Deposition (see figure 1).

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Note: the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation "following methods: dipping, painting, spraying, plasma arc, sol-gel technology, Physical Vapor Deposition or Chemical Vapor Deposition" has not been given patentable weight.

Regarding claim 11, Nakayama discloses a method for manufacturing a bushing for an electrical device, the bushing comprising an insulating core (1) the method comprising: coating (see figure 1) at least a part of the insulating core (1) with a continuous diffusion barrier (8) comprising a continuous film with firm adhesion to the insulating core (1).

Regarding claim 13, Nakayama discloses the method, further comprising: arranging an outer hollow insulator (2) outside the insulating core (1) and coating at least a part of the outer hollow insulator (2) with the diffusion barrier (8).

Regarding claim 15, Nakayama discloses the method (see figure 1) wherein the insulating core (1) and/or the outer hollow insulator (2) is coated with the diffusion barrier (8) comprising at least one of the followings: an inorganic film, an organic film or an organic/inorganic hybrid film (see figure 1).

Regarding claim 16, Nakayama discloses the method wherein the insulating core (1) is coated with a diffusion barrier (8) comprising a multi-layer film (see figure 1).

Regarding claim 17, Nakayama discloses the method, wherein depositing the diffusion barrier (8) is deposited on at least part of the insulating core (1) and/or the outer hollow insulator (9), by one of the following methods,: painting, dipping, spraying, plasma arc, sol-gel technology, Physical Vapor Deposition or Chemical Vapor Deposition (see figure 1).

***Allowable Subject Matter***

4. Claims 2, 5, 12 and 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: The primary reasons for the indication of the allowability of claims 2, 5, 12 and 14 are:

Regarding claim 2, the prior art does not teach or fairly suggest in combination with the other claimed limitation the bushing wherein the insulating core is hollow and that at least part of the inside of the insulating core is coated with the diffusion barrier .

Regarding claim 5, the prior art does not teach or fairly suggest in combination with the other claimed limitation the bushing wherein essentially the whole surface of the outer hollow insulator is coated with the diffusion barrier.

Regarding claim 12, the prior art does not teach or fairly suggest in combination with the other claimed limitation the method, wherein the insulating core is hollow, and wherein in coating at least part of the inside of the insulating core is coated with the diffusion barrier.

Regarding claim 14, the prior art does not teach or fairly suggest in combination with the other claimed limitation the method, wherein essentially the whole surface of the outer hollow insulator is coated with the diffusion barrier.

These limitations are found in claims 2, 5, 12 and 14, and are neither disclosed nor taught by the prior art of record, alone or in combination.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miggins (US 4,500,745), Pioch (US 6,156,979), Meyer et al (US 4,401,841), Keen, Jr (US 3,883,680), Donzel et al (US 7,262,367) and Kishida et al (US 4,431,859) disclose a bushing.

6. Any inquiry concerning this communication should be directed to Angel R. Estrada at telephone number (571) 272-1973. The Examiner can normally be reached on Monday-Friday (8:30 -5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) OR 571-272-1000.

/Angel R. Estrada/  
Primary Examiner, Art Unit 2831